

Application No. 10/611,796

Attorney Docket No. P16563

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:
  - determining whether data most recently read out includes dummy data;
    - determining whether an overflow state exists in part in response to a determination that the data most recently read out includes dummy data;
    - determining whether an underflow state exists in part in response to a determination that the data most recently read out includes dummy data;
    - selectively skipping over dummy data and reading out contents of a next storage location in response to an overflow state; and
    - selectively reading out at least one duplicate of previously read out data in response to an underflow state, ~~wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data.~~
2. (Previously Presented) The method of Claim 1, further comprising:
  - selectively reading out data of a next storage location in response to most recently read out data not including dummy data.
3. (Original) The method of Claim 1, further comprising:
  - selectively reading out data from a next storage location in response to no overflow and no underflow states.

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4. (Original) The method of Claim 1, wherein the selectively skipping over dummy data comprises skipping over at least one storage location.
5. (Previously Presented) The method of Claim 1, wherein the overflow state comprises a number of addressable storage locations between storage locations in which write and read operations most recently took place being equal to or greater than a specified margin.
6. (Previously Presented) The method of Claim 1, wherein the underflow state comprises a number of addressable storage locations between storage locations in which write and read operations most recently took place being equal to or less than a specified margin.
7. (Original) The method of Claim 1, further comprising writing data into storage locations according to a first clock rate, wherein each act of reading out is based on a second clock rate and wherein the first and second clock rates differ.
8. (Original) The method of Claim 1, further comprising:
  - determining the occurrence of a symbol; and
  - providing the symbol in parallel as data available for writing into storage locations.
9. (Currently Amended) An apparatus comprising:

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at least one integrated circuit, wherein the integrated circuit is to include the capability, either alone or in combination with other integrated circuits, to:

determine whether data most recently read out includes dummy data;

determine whether an overflow state exists in part in response to a determination that the data most recently read out includes dummy data;

determine whether an underflow state exists in part in response to a determination that the data most recently read out includes dummy data;

selectively skip over dummy data and read out contents of a next storage location in response to an overflow state; and

selectively read out a duplicate of previously read out data in response to an underflow state, wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data.

10. (Previously Presented) The apparatus of Claim 9, further comprising an integrated circuit that is to include the capability, either alone or in combination with other integrated circuits, to:

selectively read out data of a next storage location in response to most recently read out data not including dummy data.

11. (Previously Presented) The apparatus of claim 9, further comprising an integrated circuit that is to include the capability, either alone or in combination with other integrated circuits, to:

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selectively read out data from a next storage location in response to no overflow and no underflow states.

12. (Previously Presented) The apparatus of claim 9, wherein the integrated circuit that is to include the capability, either alone or in combination with other integrated circuits, to selectively skip over dummy data comprises the capability to skip over at least one storage location.

13. (Previously Presented) The apparatus of claim 9, wherein the overflow state comprises a number of addressable storage locations between storage locations in which write and read operations most recently took place being equal to or greater than a specified margin.

14. (Previously Presented) The apparatus of claim 9, wherein the underflow state comprises a number of addressable storage locations between storage locations in which write and read operations most recently took place being equal to or less than a specified margin.

15. (Previously Presented) The apparatus of claim 9, further comprising an integrated circuit that is to include the capability, either alone or in combination with other integrated circuits, to:

write data into storage locations according to a first clock rate, wherein each act of reading out is based on a second clock rate and wherein the first and second clock rates differ.

16. (Previously Presented) The apparatus of claim 9, further comprising an integrated circuit that is to include the capability, either alone or in combination with other integrated circuits, to:

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determine the occurrence of a symbol; and  
provide the symbol in parallel as data available for writing  
into storage locations.

17. (Currently Amended) A system comprising:
- a first device to provide an interface with a first computing platform;
  - a second device to provide an interface with a second computing platform; and
  - [[an]] a buffer device comprising at least one integrated circuit, wherein the integrated circuit is to include the capability, either alone or in combination with other integrated circuits, to:
    - receive data from the first device,
    - determine whether data most recently read out includes dummy data;
    - determine whether an overflow state exists in part in response to a determination that the data most recently read out includes dummy data;
    - determine whether an underflow state exists in part in response to a determination that the data most recently read out includes dummy data;
    - selectively skip over dummy data and read out contents of a next storage location in response to an overflow state;
    - selectively read out a duplicate of previously read out data in response to an underflow state, ~~wherein the at least one duplicate of previously read out data excludes dummy data and is independent of content of data;~~ and
    - provide the read out data to the second device.

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18. (Original) The system of Claim 17 wherein the buffer device operates in accordance with PCI express.

19. (Original) The system of Claim 17 wherein the buffer device operates in accordance with the InfiniBand Architecture.

20. (Original) The system of Claim 17, wherein the first device comprises an input/output device.

21. (Previously Presented) The system of Claim 17, wherein the second device comprises logic with capability to provide communications protocol translation.

22-24 (Cancelled)